

STRATEGY RESEARCH PROJECT

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REENGINEERING ARMY INSTALLATIONS: A SYSTEMS APPROACH

BY

LIEUTENANT COLONEL LEONARD M. FINLEY
United States Army

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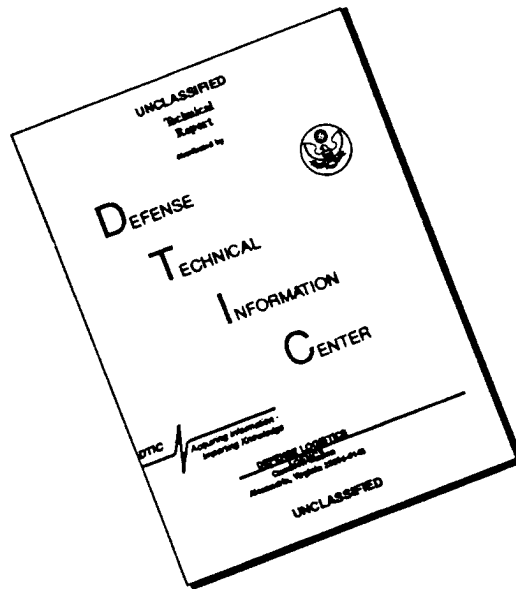


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Lieutenant Colonel Leonard M. Finley
United States Army

Colonel John T. Revelle
Project Advisor

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U.S. Army War College
Carlisle Barracks, Pennsylvania 17013

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ABSTRACT

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The Army is making the Chief of Staff's vision a reality; however, decreasing funding makes this increasingly difficult. Fundamental changes are required now. Installations, the second largest category of funding, hold great potential for efficiencies and savings. This paper addresses the actions necessary to achieve this and provides specific immediate, intermediate, and long range actions. The Army must gain maximum efficiency by creating a system for professional management of installations. Then, it must reduce the costs of installation operations through privatization. Finally, long term savings can be gained by closing and realigning bases to better reflect the current force structure. Implementation of the recommendations in this paper will provide more efficient installations while saving the Army in excess of \$1-3 billion annually and releasing 15,000 soldiers from installation duty.

TABLE OF CONTENTS

A Systems Approach.....	1
Reengineering Installations to Meet the Challenge.....	2
Installations---Home to the Army.....	3
Gaining Efficiencies Through Improved Command and Control of Army Installations.....	4
Army Installation Corps.....	8
Reducing the Costs of Army Installations.....	11
Privatization of Installation Operations.....	12
Base Closure and Realignment.....	13
Conclusions.....	24

LIST OF FIGURES AND TABLES

FIGURES

- 1.....FY96 Budget
- 2.....Proposed Installation Corps Command Structure
- 3.....Budget Outlays, By Area
- 4.....Relative Cost Per Soldier

TABLES

- 1.....Base Closures Versus Personnel Reductions, By MACOM
- 2.....Comparison of USAREUR Installation Costs
- 3.....TRADOC Installation Costs
- 4.....TRADOC Training Capacity Comparison
- 5.....FORSCOM Installation Costs

Reengineering Army Installations: A Systems Approach

America's Army must be the world's best Army--trained and ready for victory. A total force of quality soldiers and civilians:

- A values-based organization
- An integral part of the joint team
- Equipped with the most modern weapons and equipment our nation can provide
- Able to respond to our nation's needs
- Changing to meet the challenges of today...tomorrow...and the 21st century.¹

Vision statement, General Dennis Reimer, Army Chief of Staff, Sept 1995

The Army is making this vision a reality; however, decreasing funding makes this increasingly difficult.

...you see our resources are down dramatically. They have been reduced about 40 percent in terms of the budget...You build programs and plans based on \$96 billion, and you execute based on \$60 billion.²

General Dennis Reimer, Army Chief of Staff, Sept 1995

If the Army does not make some fundamental changes now to meet the challenges of the future, this strategic vision is in peril.

The Army is a total force of quality individuals, a values-based organization and an integral part of the joint team. The good news ends there.

Top-level DoD funding is down 45% since 1988. Operations and maintenance funding is stable. BRAC reduced infrastructure only 22%, therefore, procurement takes a hit (down 70% from its peak) and is at an all time low since World War II. The Army is going bankrupt. This year there are no truck, helicopter, or tank buys. The industrial base is going broke.

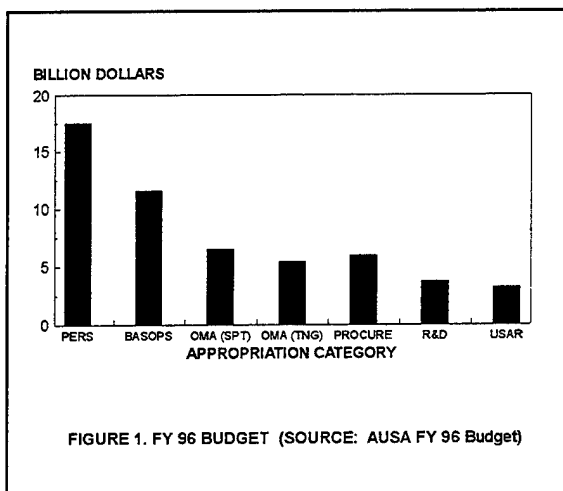
A senior official speaking at Army War College, Dec 1995

Training, readiness, and modernization are underfunded and at risk. Base operations, a key to retaining quality personnel and the power projection platforms to respond to crises, are also underfunded. Although funds are frequently diverted from training and readiness to prop up base operations, base infrastructure

and quality of life at many installations has deteriorated to the point of Congressional concern. Clearly, this is unacceptable!

Reengineering Installations to Meet the Challenge

The Army must reengineer its entire approach to installations. Hidden throughout the budget, base operations are already the second largest single category of funding (see Figure 1). The Army cannot count upon additional funds to solve the problems of installations.



In fact, more money goes to taking care of people, their families, and training them than ever before...Overall, quality of life initiatives, training, and extra costs associated with taking care of extended families throughout the military just adds to the cost of this commodity [personnel]. If we don't constrain our appetite, we won't be able to procure any new weapon systems.³

Director, DoD Net Assessment, October 1995

Immediate, intermediate, and long range actions are required. The Army must act immediately to gain maximum efficiency in current installation operations, given current resources. This can be accomplished by creating a system for professional management of installations, something that is currently lacking. Mid-range, the Army must reduce the costs of its current inventory of installation operations primarily through privatization. Finally, long term savings can be gained by closing and realign-

ing bases to better reflect the current force structure. Unless the Army changes its current methods of installation management and operations, and reduces its inventory of installations to meet the budget challenges, installations will continue to deteriorate, modernization will wait, and training and readiness will suffer.

Installations---Home to the Army

Installations are home to the Army and its families. They provide the quality of life necessary to the retention and readiness of the quality soldiers and civilians who make this the world's best Army. Taking care of soldiers, civilians, and their families is absolutely essential to achieving the CSA's vision!

Doing right by soldiers--putting them first--is the centerpiece of my strategy. To show soldiers that they are the most important part of our Army, I must ensure that they enjoy a respectable quality of life as well. The quality of life of our soldiers, civilians, and their family members is an integral part of their sustainment, as it is vitally important to their commitment and to Army readiness.⁴

Togo West, Secretary of the Army, Oct 1995

I join our senior leadership...in their efforts to revitalize the QOL programs for our people. As the Chairman says, "No single investment is more important than our people."⁵

General Dennis Reimer, Army Chief of Staff, Sept 1995

Even with this emphasis and relatively stable funding, Army installations are generally in poor health. At an increasing number of installations, soldier quarters, family housing, and post infrastructure are inadequate and, in some cases, crumbling. Many posts are reducing quality of life programs due to a lack of funds. This problem has become so severe that it is receiving

intense scrutiny from Congress; however, most of the focus is on efficiency, not on additional funding.

The Army cannot simply cut installation operations to save funds. This approach would adversely affect morale and retention. Additionally, because quality of life programs are relatively inexpensive, these cuts would not provide the necessary savings. Maintenance of buildings, roads and grounds, and utilities constitute the majority of installation costs. Therefore, significant funds cannot be obtained simply by cutting entire quality of life programs. These savings must be garnered through a variety of actions which provide for immediate efficiencies, and mid- and long-term solutions to current problems.

Gaining Efficiencies Through Improved Command and Control of Army Installations

In the near-term, the Army must develop a system which provides for effective, efficient command and control of installation operations in order to use current resources more effectively.

We must find smarter ways to do business, streamline our management processes, reduce overhead, leverage outside resources, and use what we have more efficiently to be more effective.⁶

General Dennis Reimer, Army Chief of Staff, Sept 1995

This system must include professional management at both the DA and installation levels, and a command structure which facilitates more efficient use of dwindling funds. It must provide personnel who are trained and educated to perform these duties. The current Army system accomplishes none of these. Although the

Army has discussed many options to solve the problem, it has not initiated any concrete solutions. The Army acquisition system provides a model which can be readily adopted.

The Army Acquisition Corps was formed in response to the Packard Commission study of defense management which concluded:

Defense acquisition represents the largest and, in our judgement, the most important business enterprise in the world. It deserves to be managed with the highest of standards.⁷

The commission noted that the 165,000 people employed by DoD in various acquisition capacities must be the highest quality personnel, managed by a Service Acquisition Executive, and have their own career track. The Army went even further by creating a three-star military deputy because "it believes this level of authority is needed to ensure the act's implementation."⁸ The Army created an independent command structure where funding, other resources, and accountability flow from the Secretariat through the military deputy to Program Executive Officers (general officers and senior civilians) to Program Managers (centrally selected colonels and lieutenant colonels plus senior civilians).⁹ It created a dedicated Corps of officers and civilians who make a full-time career as acquisition specialists. These individuals have specific criteria for selection, assignment, career paths, and promotion as well as established education and training requirements.¹⁰

In 1986, when the Packard Commission process began, acquisition budgets of \$26.7 billion represented one-third of the Army's expenditures, and exceeded OMA and active personnel costs. In

1996, the Acquisition Corps budget is \$11 billion while installation budgets total \$13 billion.¹¹ The same rationale used to create the Acquisition Corps and its command structure can now be applied to installations to develop both a professional management structure and a professional Corps of certified installation managers. The current system has neither.

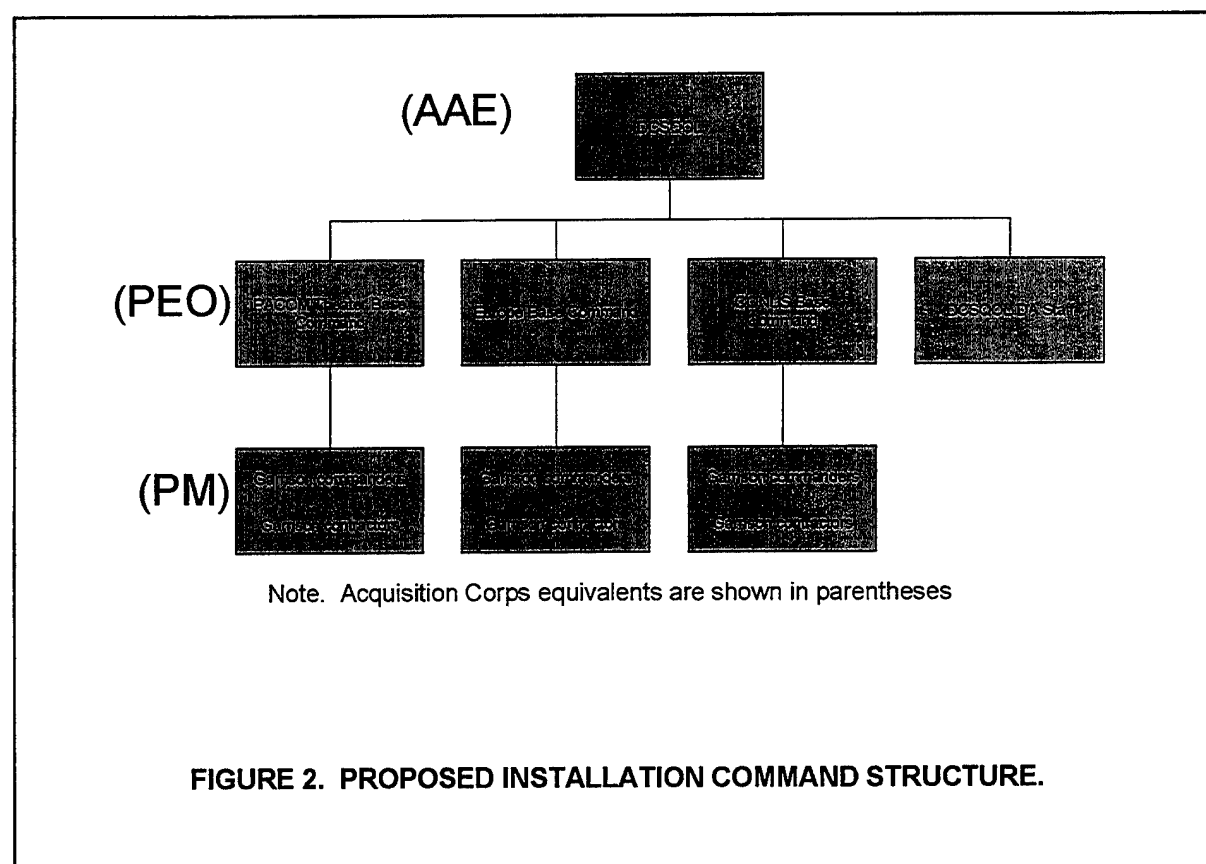
The Assistant Chief of Staff for Installation Management (ACSIM), a major general, manages installation operations at the Army staff level. This places DA-level emphasis on installation operations; however, it is only a partial solution. In the Pentagon, major programs require a three-star sponsor. The rationale to create a three-star deputy to the Army Acquisition Executive was valid in 1986 for acquisition and it is valid in 1996 for installations. Only the DCSPER, a lieutenant general, has DA-level staff responsibility for a larger portion of the Army budget. If 165,000 personnel in acquisition DoD-wide are significant enough to warrant an Army Acquisition Executive to oversee all acquisition programs, then the 100,000 people working in installation operations in the Army alone require a similar structure.¹² Therefore, ACSIM must be upgraded to a three-star deputy position. This position, the Deputy Chief of Staff for Quality of Life (DCSQOL), would have absolute responsibility for all facets of base operations and the resources necessary to accomplish this mission.

Having established professional leadership at the DA-level, the entire command structure for base operations should be

modified along the lines of that used for acquisition.

Today, 156 Program Managers (PMs), who are mostly lieutenant colonels and colonels, report to 12 Program Executive Officers--who report to the Army Acquisition Executive (AAE), who channels manpower and money back down the chain...Resources now are provided to PMs directly from Headquarters, Department of the Army, through the PEOs, instead of being rationed through MACOMs.¹³

The proposed organization of the Army Base Command (BASECOM) is given at Figure 2. At the lowest level, installation commanders



would be responsible for day-to-day activities in the same manner as Program Managers are for their acquisition programs. They would report to theater BASECOM commanders, general officers in command of organizations which are responsible for all installation operations within a given theater. Theater BASECOM com-

manders would report directly to the DCSQOL in the same manner as Program Executive Officers report to the Army Acquisition Executive. DCSQOL would be dual hatted as the Commander, Army Base Command and would be responsible for all installation operations Army-wide. Funding and command structure, as with acquisition, would run through the BASECOM, not the MACOMs. This resource flow and rating scheme would provide for unity of effort in a manner similar to a Division Artillery or a Division Support Command.

The entire DCSQOL and Base Command structure can be implemented within one year of a decision. Personnel necessary to fill this organization exist throughout the Total Army. While specific savings cannot be quantified, the efficiencies gained will provide more effective use of current resources.

Army Installation Corps

With an organization in place to provide professional leadership and management of installations, the Army must focus on fully developing the personnel necessary to man this structure. The current system is totally inadequate.

Army posts are divided into lieutenant colonel and colonel-level commands, based upon their size and complexity. In CONUS, these individuals are referred to as Garrison Commanders, regardless of rank. Overseas, colonels command Area Support Groups (ASGs) and are responsible for two to five Base Support Battalions (BSBs), each commanded by a lieutenant colonel. In all

cases, commanders for these installations are centrally selected from the officer pool, a process which ensures quality individuals. It also ensures a lack of experience as most officers enter garrison command with no practical experience and only a three-week course as preparation. Additionally, there is no formal system in place to ensure that the experience gained by lieutenant colonel garrison commanders is used at the more complex colonel garrison command, or at MACOM or Army level. While this year's colonel command selection board is the first with a significant number of former lieutenant colonel garrison commanders, no former junior level garrison commander has been selected for garrison/installation command at the colonel level. This trend further compounds the Army's problem with professional management of installations.

Army installations; however, are not simply military leadership. Civilians play a key role in providing senior leadership at all installations. Unfortunately, their training, education, and career track is no better than that for the military. Civilians have recently acknowledged the need for installation-specific expertise. Base Operations career field 29 and MWR career field 51 have been established; however, no entry criteria, educational requirements, or career tracks have been developed for either field. These problems, and those identified for military leadership, can be solved by creating an Army Installation Corps.

Creation of an Army Installation Corps would have most of

the same goals cited in the DoD Implementation Report for Acquisition:

- Reduce overhead costs while maintaining military strength
- Enhance program performance
- Reinvigorate the planning and budgeting process
- Reduce micro management
- Improve ethical standards.¹⁴

The Installation Corps could not mirror the Acquisition Corps; however, the basic tenants (shown in quotations)¹⁵ would be the same:

a. "Select highly promising officers and civilians early in their careers" using the current command selection process at the lieutenant colonel level. Officers slated into garrison commands would join the Installation Corps. Civilians would have entry requirements to join the career fields at specific levels.

b. "Specialize in installation management" through continued assignments to installation positions, and BASECOM and DCSQOL staffs.

c. "Receive intensive training" to include training in base operations prior to assumption of command or significant civilian leadership positions. For officers, this training could be accomplished in lieu of the current precommand courses. Civilians should have designated training and education requirements geared to promotion and selection for specific duty positions. Officers and civilians selected for attendance to a Senior Service College would be provided the opportunity to obtain an advanced degree in Public Administration.

d. "Create attractive and equitable career paths" by making

these officers and civilians the nucleus for the theater BASECOM commanders and DCSQOL staffs, and for colonel-level garrison commands and managers.

Establishment of an Army Installation Corps would provide the Army with a nucleus of high quality, skilled officers and civilians capable of meeting the unique demands of installation management.

Leadership is the key to meeting these [installation] challenges. The success of entrepreneurial programs depends on the development of leaders who are willing and able to be innovative, seize the initiative, and embrace a totally new perspective on conducting their business...installation management requires our commanders to shift their thinking from a tactical perspective to a business perspective...Considering the scale on which we ask them to operate, perhaps our [garrison] commanders may be better compared with corporate chief executive officers than with city managers.¹⁶

The nucleus of the Installation Corps already exists in former garrison/installation commanders and in civilian directors and garrisons managers. Therefore, it can be formed rapidly. The efficiencies gained from an experienced Corps will significantly enhance the effectiveness and efficiency of installation operations without increasing costs.

Reducing the Costs of Army Installations

Having addressed the immediate leadership problem, the Army must turn its attention to intermediate solutions designed to reduce the costs of its current installations. "Installation 21" is such an attempt by FORSCOM.¹⁷ This study will yield useful conclusions and some level of savings; however, it is akin to putting a Band-Aid on a sucking chest wound. Installation level management does not need changes at the fringe but rather a

complete reinvention to significantly reduce costs. Reducing costs would allow the Army to reallocate funds to improve quality of life at all installations. Privatization of some installation operations would provide these savings.

Privatization of Installation Operations

The Vice Chairman of the Joint Chiefs of Staff has strongly recommended privatization of base operations.

The military could save billions of dollars a year by turning day-to-day base operations over to private contractors. Our expertise is in fighting wars. We have organized and trained for decades to do that. We have not trained for decades to do property management.¹⁸

Admiral William Owens, Vice Chairman, JCS, Oct 1995

Based upon Navy and Air Force experience, Admiral Owens estimates that large contractors could run bases for 25 to 30 percent less than the military and that, if only half of the bases in DoD were privatized, the department could save \$20-25 billion annually. Privatization will save the Army significant funds; however, not all installation operations are amenable to outsourcing. First, some need to remain with the garrison due to military necessity. Second, in some areas, local laws force us into uneconomical situations and are clearly not in the Army's interest. Finally, the Army must ensure that contractors are fully capable of fulfilling the contract. While wholesale privatization may not be feasible, "the leverage of private sector resources would help to stretch the Army's tight budget. There is also great potential to improve quality of life for soldiers and their families."¹⁹ Therefore, the Army must analyze, on an installation-

by-installation basis the feasibility of privatization; however, some general recommendations apply.

Public works constitute around 60-65% of an installation's budget. While some commanders may desire to retain master planning and capital improvement within the garrison, every facet of public works can be privatized. The Directorate of Logistics, about 15-20% of an installation's budget, can also be readily privatized. Dealing with transportation and installation-level logistics, it has many civilian counterparts. Community Activities provide recreation services, a field which is booming in the civilian sector. While this constitutes only about 10% of an installation's budget, it can be easily privatized. Military Police operations are provided primarily by soldiers and constitutes only about 2% of an installation's budget. Significant civilian counterparts exist; however, the introduction of salaries would actually increase cost. Regardless, privatization may be preferred due to over tasking of Military Police, Army-wide. Eliminating garrison police responsibility would provide a significant increase in the availability of Military Police for tactical missions. Finally, the installation intelligence, security, and operations section constitutes only about 2% of an installation's budget. Providing power projection planning, force protection operations, and physical and information security, this section performs a critical operational mission and should not be privatized.

In addition to significant financial savings, privatization

would also provide relief for the force structure problem. Installation TDAs contain more than one division of soldiers (15,000) specifically for base operations.²⁰ Privatization will free most of those spaces for use elsewhere in the Army. Garrison commanders, together with a small quality control team, would manage the efforts of the contractor to ensure that local needs were being met. Small installations with few soldiers (Labs, Arsenals, Depots, etc.) could be managed by civilians, further reducing military manpower requirements. Had the Army privatized base operations this fiscal year, these TDA garrison spaces would have provided almost three-fourths of the savings required to make up the \$400 million shortage in the personnel account.

The Army has acknowledged the necessity to privatize and has made it a topic at the past two Installation Commanders Conferences. It has, however, taken few specific actions to implement privatization. Based upon Admiral Owens' estimate, privatization has the potential to provide the Army with savings of \$1 to \$3 billion annually and would add almost 15,000 soldiers into the force structure. This action alone could provide the funds necessary to improve crumbling infrastructure and shore up quality of life programs while returning a division's worth of soldiers to the TO&E Army. Because the actual operations which can be privatized require further study and must then be contracted, this process could be implemented over two to five years.

Base Closures and Realignments

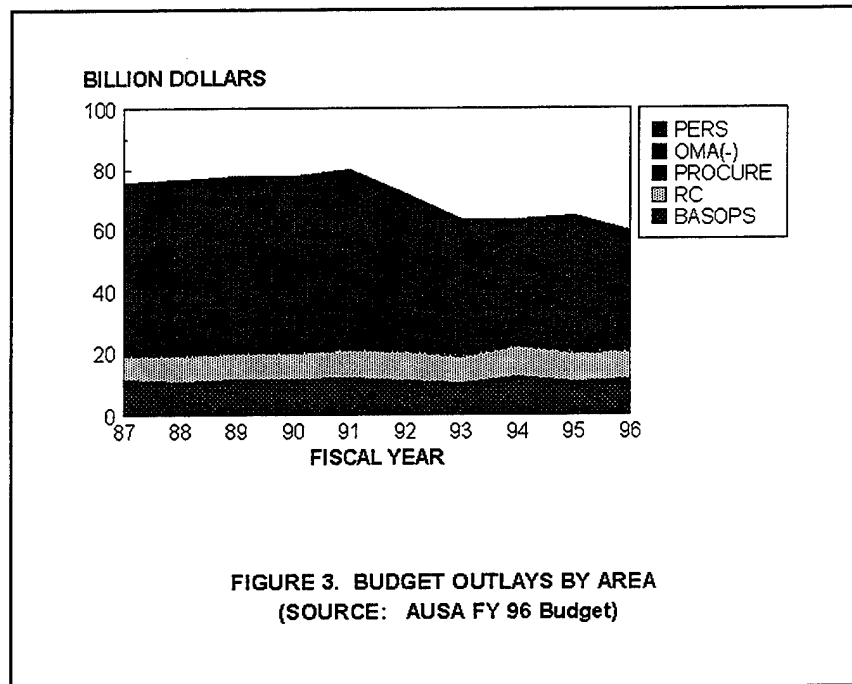
While privatization can save manpower and money, it is only half of the cost cutting battle. The most significant long term savings can be gained by closing installations.

The 1997 defense budget will be the first to get a boost from base closings, about \$1.7 billion. Annual savings of \$3 billion to \$4.5 billion are expected from 1998 through 2001.²¹

The Army must find significant savings without compromising military capability; however, options are limited. The Bottom Up Review established the base force required for national security requirements. This base force fixed the force structure, the number of personnel in the force, and the training requirements for that force. Procurement, research, and development are already at a post-World War II low and cannot be cut further without jeopardizing the future capabilities of the Army. Modernization has, for all intents and purposes, ceased. Reserve component funds have been seen as a potential source; however, past efforts have been only marginally successful. This leaves only installations.

Scattered in nearly every category of funding, base operations, as a separate category of funding, are second only to personnel costs. Although the Army's top line has been reduced by one-third, base operations funding has remained steady (see Figure 3). In addition to competition for front end dollars, base operations detract from training and readiness by diverting training funds during the fiscal year.²² In FY94, this reallocation resulted in significant degradation to readiness in eight of

the Army's ten divisions. This makes installation operations, by definition, too expensive.



The Army's chickens finally came home to roost in 1994, which closed with two-thirds of the service's active divisions lacking the readiness to perform all their wartime missions...Service leaders had been raiding O&M accounts for years to pay for underfunded installation and quality of life costs, while managing to keep readiness 'on razor's edge'...But this year, eight divisions fell off that edge.²³

Installations provide the only viable alternative for saving funds. To achieve these savings, the Army must break the institutional inertia which has prevented it from completely realigning its base structure with its reduced force structure. Since 1988, the Army has decreased its troop strength by 33% yet has closed only 22% of its installations.²⁴ Analysis of these closures indicates that the true picture is even more imbalanced. Of the installations designated for closure, the overwhelming majority are in Europe. Most CONUS installations designated for

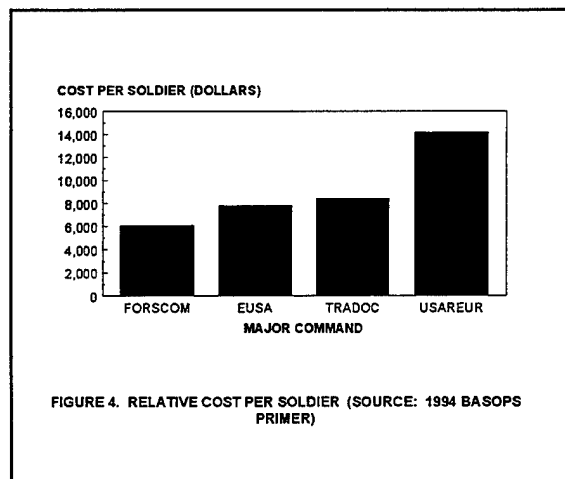
closure are part of the industrial or logistics base (arsenals, depots, labs), not "troop" posts. Table 1 shows the true status of base closures and indicates that the Army must do more. It must make the difficult decisions on retention of installations based upon operational utility and cost. While operational utility is the most important factor, a brief analysis of cost reveals some significant, tough decisions to be made within each MACOM.

MACOM	PERCENT SOLDIER REDUCTION	PERCENT INSTALLATIONS CLOSED
FORSCOM	29%	12%
TRADOC	33%	13%
USAREUR	83%	73%
EUSA	0%	26%

Table 1. Base Closures Versus Personnel Reductions, By MACOM
(Source: Vol II, Installation Assessment and Process Spt Data)

Installation costs vary significantly both between and within the MACOMs. Figure 4 gives the cost to support one soldier in each major troop command. Although there are reasons for the disparities, these costs must be addressed by each of the MACOMs.

USAREUR has a unique problem. It provides a "slice of America" not only to soldiers and their families but to the US civilian employees who supply that support. Instead of supporting



65,000 soldiers, the system actually supports those soldiers, 16,000 civilians, 103,000 family members, 6,600 retirees, and 4,300 contractors.²⁵ The current geographic dispersion of ASGs/BSBs compounds this problem. Each BSB provides quality of life facilities to its individual community, usually only 3,000 to 5,000 soldiers. As shown in Table 2, this is a very expensive venture. USAREUR can reduce its cost by a combination of measures; however, none of the options are particularly easy or palatable. It can restation units and restructure its ASG/BSBs, reinvent its current quality of life infrastructure, or revert to unaccompanied tours.

Restationing units would eliminate the current dispersion and would

ASG	No. of BSBs	Military Population	Cost Per Soldier	Civilian Population	Family Member Population	Cost per Person
6th	1	3283	31,231	1620	6175	7,695
22nd	1	2593	25,684	852	4360	7,686
28th	3	13104	22,733	4756	22590	6,589
53rd	3	10356	15,073	2798	16682	5,132
80th	3	2793	114,106	588	4298	39,683
98th	4	18059	13,572	1446	24938	5,418
100th	2	5588	54,491	598	7899	20,860
104th	2	11402	20,171	1556	16523	7,566
UR		67,178	27,033	16,214	103,455	6,788

Table 2. Comparison of USAREUR Installation Costs
(Source: USAREUR FY95 Comparative Analysis...ASG Activities)

allow for restructuring of the current ASG and BSB support structure. This option; however, is limited by facilities. Closed facilities have been returned to the host nation. Where adequate facilities are not available, construction costs make this option unaffordable. This leads to the second option, reinvention of the current quality of life infrastructure.

USAREUR quality of life standards provide unparalleled support of soldiers, civilians, and their families. They also create unaffordable and duplicate facilities both within and

between BSBs. USAREUR must change this through consolidation; however, changes will have a definite impact on the morale of soldiers and their families. Additionally, because quality of life is relatively inexpensive, significant savings may not be achieved. This leads to the final alternative, reduce the costs of supporting soldiers in Europe by making it an unaccompanied tour.

USAREUR could drastically reduce its cost per soldier by eliminating families. If the cost per soldier approached that presently in Korea, it would save nearly \$350 million annually. This option would, however, have a significant impact on the entire Army. With personnel tempo at an all time high, Army leadership has expressed repeated concern about the time soldiers spend apart from their families. Creation of an additional unaccompanied tour would create more family separations and heighten this concern. This option, a last resort, requires detailed study.

TRADOC, second to USAREUR in cost per soldier, must reduce installation costs. These costs are affecting the command's ability to accomplish its primary mission and are therefore, too high.

Since 1990, TRADOC has lost roughly one-third of its personnel, and has had its funding cut by a similar amount...in addition, TRADOC must manage the same number of installations it had before the drawdown. This has limited the command's ability to cut its overhead. This mismatch meant something had to give...But even after cutting these activities, TRADOC leaders have been hard pressed to safeguard their priority missions...Base operations has been hit particularly hard...Funding shortages have rendered the upkeep of TRADOC's facilities increasingly difficult...Maintenance has fallen by the wayside...After a while, roads don't get fixed and buildings don't get repaired, to the extent that toilets don't get repaired.²⁶

TRADOC installations, their costs per soldier, and their primary functions are given at Table 3. Reducing these costs will require breaking the "branch school house" paradigm.

TRADOC should realign its entire training base using the Combined Logistics Officer Advanced Course (CLOAC) as a model. Development of this course required TRADOC to over-

POST	COST PER SOLDIER	PRIMARY TRAINING
JACKSON	5300	BASIC/AIT
SILL	5878	ARTILLERY
BENNING	6176	INFANTRY
GORDON	6270	SIGNAL
RUCKER	7800	AVIATION
LEE	7876	LOGISTICS
BLISS	7843	AIR DEFENSE
HUACHUCA	7860	INTEL
KNOX	9206	ARMOR
LEON WOOD	9259	ENGINEER
LEAVENWORTH	10546	CGSC/CAC
CARLISLE	11585	WAR COLLEGE
MONROE	11595	TRADOC HQ

Table 3. TRADOC Installation Costs (Source: Vol II, Installation Assessment and Process Spt Data)

come branch parochialism and acknowledge that the majority of each of the separate curriculum was common. CLOAC consolidated resources while retaining branch specific tracks within the course. This approach must be expanded TRADOC-wide through the creation of four basic centers for training operations.

a. Army University would consolidate TRADOC headquarters and its senior leadership schools (Army War College, Command and General Staff Officers Course with its SAMS course, and the Sergeant Major Academy) on a single installation. This provides for more efficient use of TRADOC resources and allows for the closure of two of the three (Monroe, Leavenworth, Carlisle Barracks) installations.

b. Army Combat Arms Center would combine the current Infantry, Armor, and Field Artillery Centers both for training and

combat development. Common core courses can be followed by specific tracks for branch unique training. At most, this center would require two of the current three posts (Benning, Knox, Sill), allowing for the closure of the third installation.

c. Army Combat Support Center would combine air defense, engineer, signal, and intelligence training from four installations (Bliss, Gordon, Huachuca, Leonard Wood). Because of unique training, aviation would remain at Fort Rucker limiting consolidation of operations into two installations.

d. Army Combat Service Support Center already exists, to a limited extent, at Fort Lee. Further consolidation would enhance this process with limited savings.

Course throughput and facilities would not present a challenge to consolidation of the training base. A comparison of the training through-

put during the Vietnam War and the present is given, by proposed training center, in Table 4. Even after allowing for improved training, better quality of life, and more ef-

POST	IET FY68	IET FY94	PROF SCHOOL FY68	PROF SCHOOL FY94
JACKSON	50,937	40,748		
GENERAL IET				
SILL		13,271	10,375	4,934
BENNING	45,502	14,631	34,733	24,967
KNOX	54,947	11,123	7,415	6,960
COMBAT ARMS TOTAL		39,025		36,881
LEONARD WOOD	52,628	23,916	13,493	3,755
BLISS	38,800	2,148	4,811	2,867
MCCLELLAN		14,767	6,031	6,884
HUACHUCHA		1,823	5,260	3,788
GORDON	29,736	9,423	12,710	6,134
CS TOTAL		52,077		23,428

Table 4. TRADOC Training Capacity Comparison (Source. Dr. Anne Chapman, TRADOC Historian)

fective weapon systems on which to train, the proposed

reengineered training centers have sufficient capacity to handle the anticipated training load while saving significant money. Because specific posts were not named, exact costs cannot be determined. Closing the least expensive posts in each category gives minimum savings of \$320 million annually.

The Eighth US Army (EUSA) in Korea is primarily unaccompanied and does not support family members to the same extent as USAREUR. EUSA strength has remained relatively constant yet the command has closed 22% of its installations.²⁷ Further savings can be gained through increased efficiencies; however, these savings will be marginal.

FORSCOM, although the lowest cost per soldier, provides the greatest potential for cost savings. FORSCOM must consolidate and reduce its installations to align with its reduced force structure. Its soldier strength decreased by 29% yet FORSCOM has closed only 10% (2) of its major installations.²⁸ FORSCOM could close an additional two to three installations; however, numbers alone cannot determine this equation. Operational utility must be the driving factor.

The ability to respond rapidly from CONUS based power projection platforms with overwhelming combat power to regional crises or to humanitarian missions is pivotal to our installations' emerging role.²⁹

In a 1991 article in Army Logistician, LTC Thomas Rozman introduced a concept he called "operational basing" for the Army. Until World War I, Army forces were based for operational purposes; i.e., frontier defense, coastal defense, etc. With the advent of force projection and the designation of Army installa-

tions as "power projection platforms," this concept must again be applied. To properly support the forces, an installation must:

- Garrison a ground combat force of three or more brigades
- Provide contiguous land for training this force to standard
- Possess contiguous facilities for rapidly projecting the force anywhere required.³⁰

Both the DCSOPS of the Army and ACSIM agree with the training and deployment portions of the operational basing concept:

As the Army becomes increasingly based in the continental United States, it becomes more dependent on the ability to rapidly deploy tailored force packages and the appropriate command and control to any overseas conflict.³¹

Our enduring installations must be world class power projection platforms from which we can successfully project and sustain our trained and ready force to support the National Military Strategy.³²

Although FORSCOM installations must be both power projection platforms and affordable, Table 5 shows that this is not the case. The least affordable posts generally are also the least deployable. Four posts (Campbell, Carson, Riley, Drum) are too far from sea ports. Given the self deployability of the 101st Airborne (Air Assault), this is not an issue for Fort Campbell. The remaining three posts (Carson, Riley, Drum) are the least deployable, the most expensive, and should be considered for closure. This process requires action under the Base Realignment and Closure

POST	COST PER SOLDIER	DISTANCE TO SEA PORT	MANEUVER BRIGADES
BRAGG	4362	100	3 PLUS CORPS
HOOD	4762	274	5 PLUS CORPS
CAMPBELL	5026	627	3
STEWART	5552	40	2
CARSON	5914	1095	2
RILEY	6965	727	2
LEWIS	8195	--	2
DRUM	11794	350	2

Table 5. FORSCOM Installation Costs (Source: Vol II, Installation Assessment and Process Spt Data)

Act and could take in excess of five years. However, the savings from closing these posts would be in excess of \$350 million annually.

Conclusions

The Army must seize each of these opportunities to gain significant savings from installation operations while simultaneously improving the quality of those installations.

First, the Army must gain efficiencies by providing for professional management of its installations at all levels. This can be accomplished by upgrading the Assistant Chief of Staff for Installation Management (ACSIM) to a three-star position, the Deputy Chief of Staff for Quality of Life (DCSQOL) and making the DCSQOL responsible for all aspects of installation operations through the Base Command. Command would run from DCSQOL through Theater Base Commanders to installation commanders. All of the individuals within this organization would be members of the Army Installation Corps. This Corps would be organized similar to the Acquisition Corps and would provide trained, educated officers and civilians capable of professional management of installation operations at all levels.

Having addressed the leadership of installation operations, the Army must reengineer the operations at installation level to reduce cost. Privatization of key aspects has the greatest potential to accomplish this. In addition to saving funds, privatization would free nearly a division of soldiers for use

elsewhere in the Army. An intermediate solution, privatization requires further study to determine the specific areas for contracting and could require two to five years to fully implement.

Finally, the Army must restructure its inventory of bases to provide funds for other uses. USAREUR must consolidate operations into larger installations or risk becoming an unaccompanied tour. TRADOC must break the "branch school house" paradigm, consolidate operations into larger, more efficient centers, and close the remainder. FORSCOM must bring its inventory of installations into line with its reduced force structure by closing posts which do not support the mission of power projection and are its most expensive to operate.

A conservative estimate of the potential savings to the Army from these recommendations totals between \$1.9 and \$4 billion annually, funds that are badly needed. Additionally, nearly 15,000 soldiers can be freed for reassignment elsewhere within the Army, soldiers that are badly needed to maintain readiness in critical units.

The Army must implement these recommendations then must use these savings in funds and soldiers to accomplish its priority missions...modernization, training, and readiness. Funding cuts, coupled with diversions of funds to base operations and modernization, have already had a significant, negative impact on training and readiness. Research and development are at a post-World War II low. Modernization has, for all intents and purpos-

es, ceased. Our current inventory of CONUS installations is in bad shape and does not support the power projection mission. Reengineering installation operations has the potential to provide the Army with the funds and personnel required to correct this situation and make the Chief of Staff's vision a reality:

America's Army must be the world's best Army--trained and ready for victory. A total force of quality soldiers and civilians:

- A values-based organization
- An integral part of the joint team
- Equipped with the most modern weapons and equipment our nation can provide
- Able to respond to our nation's needs
- Changing to meet the challenges of today...tomorrow...and the 21st century.

Vision statement, General Dennis Reimer, Army Chief of Staff,
Sept 1995

ENDNOTES

1. GEN Dennis Reimer, "Maintaining a Solid Framework While Building for the Future," Army Green Book, Oct 1995, p. 23.
2. GEN Dennis Reimer, "Soldiers Are Our Credentials" Military Review, September-October 1995, p. 5.
3. Andy Marshall, Director of Net Assessments, DoD, "Funding Fork in the Road: People Vs Weapons," interview by Robert Holzer, Army Times, Oct 23, 1995, p. 34.
4. Togo West, "Doing Right By Soldiers--Putting Them First," Army Green Book, Oct 1995, pp. 13-19.
5. Reimer, Army Green Book, p. 24.
6. Reimer, Army Green Book, p. 26.
7. David Packard, et al. A Quest for Excellence, Final Report to the President by the President's Blue Ribbon Commission on Defense Management, Washington, DC, June 1986, p. 41.
8. Acquisition Management: Implementation of DAWIA, GAO/NSIAD-93-129, Washington, DC, April 1993, p. 9.
9. "Acquisition Corps Established," Army Logistician, May-June 1990, p. 3.
10. Dick Cheney, Defense Management Report to the President, Washington, DC, July 1989.
11. AUSA Institute of Land Warfare, Fiscal Year 96 Budget, Arlington, VA, May 1995.
12. Figure is determined, for appropriated funds, from tables in Army BASOPS Primer, BASOPS PEG, ACSIM, Washington, DC and, for NAF, from briefing given in an AWC Advanced Course on civilian personnel.
13. Frank Cox, "Beans, Bullets, and Budgets," Army, May 1990, p. 35.
14. Defense Management Report Implementation Progress Report, DoD, Pentagon, Washington, DC, 1990, p. 1.
15. Tenants of Acquisition Corps were taken from Defense Management Report to the President, by Secretary of Defense Dick Cheney, July 1989, p. 14.
16. MG John H. Little, "Base Command," Army, August 1994, pp.

17-21.

17. Chet Bridger, "Army Looks At Ways To Streamline Post Operations," Army Times, Oct 9, 1995, p. 24.

18. William Matthews, "Owens: Big Savings in Privatizing Support," Army Times, Oct 23, 1995, p. 37.

19. Bob Bayer as quoted by Penelope Schmitt in "Privatization", Public Works Digest, US Army Center for Public Works, Alexandria, VA, Jan-Feb 96, pg 2.

20. ACSIM, BASOPS PEG Team, Army BASOPS Primer 1994, Pentagon, Washington, DC, 1994, pp. 37-61.

21. Bernard Adelsberger, "Payoff From Base Closings Could Happen This Year," Army Times, Mar 18, 1996, pg 14.

22. Louis C. Finch, Deputy Under Secretary of Defense for Readiness, "Keeping Forces Ready to Fight," Defense 95, Issue 4, p. 8.

23 Sean D. Naylor, "To The Limit," Army Times, January 2, 1995, p. 9.

24. Base closure percentage is based upon BRAC Book published by ACSIM. Personnel reductions were determined using the Army Green Books for 1988 and 1995.

25. USAREUR FY96 Comparative Analysis...ASG Activities, HQ, USAREUR, Heidelberg, Germany, 1995.

26. Sean D. Naylor, "Stretching To Make Ends Meet," Army Times, May 22, 1995, pp. 5-7.

27. DoD Base Summary. Summary of Domestic and Overseas Base Closure, DoD, Pentagon, Washington, DC, 1995.

28. Base closure percentage is based upon BRAC Book published by ACSIM which states that 2 have been closed, 17 retained. Major is defined by ACSIM in their BASOPS 95 as "Any Active Army installation which has 5000 or more US service members, US DoD civilian employees, and/or other tenants assigned as reported in the ASIP." Personnel reductions were determined using the Army Green Books for 1988 and 1995.

29. ACSIM, Resource Integration Office, Army BASOPS Primer 1995, Pentagon, Washington, DC, Jan 95, p. 4.

30. LTC Thomas Rozman, "Operational Basing of the Army," Army Logistician, Sep-Oct 1991, pp. 33-35.

31. LTG Paul E. Blackwell, "Sustaining Land Power Dominance in the 21st Century," Army Green Book, Oct 1995, p. 110.

32. Army BASOPS Primer, 1994. p. 4.

BIBLIOGRAPHY

"Acquisition Corps Established," Army Logistician, May-June 1990, p. 3.

Acquisition Management: Implementation of DAWIA, GAO/NSIAD-93-129, Washington, DC, April 1993.

ACSIM, Resource Integration Office, Army BASOPS Primer 1995, Pentagon, Washington, DC, Jan 95, p. 4.

ACSIM, BASOPS PEG Team, Army BASOPS Primer 1994, Pentagon, Washington, DC, 1994.

ACSIM, The Army Basing Study, Volume I, Installation Narratives, Pentagon, Washington, DC, March 1995.

ACSIM, The Army Basing Study, Volume II, Assessments and Supporting Data, Pentagon, Washington, DC, March 1995.

ACSIM, The Army Basing Study, Volume III, Analyses and Recommendations, Pentagon, Washington, DC, March 1995.

Adelsberger, Bernard, "Payoff From Base Closings Could Happen This Year," Army Times, Mar 18, 1996, pg 14.

Adelsberger, Bernard, "NCOs Drained From Stateside Units," Army Times, January 29, 1996, p. 3.

AUSA Institute of Land Warfare, Army Budget Fiscal Year 1987, Arlington, VA, 1986.

AUSA Institute of Land Warfare, Army Budget Fiscal Year 1988, Arlington, VA, 1987.

AUSA Institute of Land Warfare, Army Budget Fiscal Year 1989, Arlington, VA, 1988.

AUSA Institute of Land Warfare, Army Budget Fiscal Year 1990, Arlington, VA, 1989.

AUSA Institute of Land Warfare, Army Budget Analysis Fiscal Year 1991, Arlington, VA, 1990.

AUSA Institute of Land Warfare, Army Budget Analysis Fiscal Year 1992, Arlington, VA, 1991.

AUSA Institute of Land Warfare, Army Budget Analysis Fiscal Year 1993, Arlington, VA, 1992.

AUSA Institute of Land Warfare, Army Budget Analysis Fiscal Year 1994, Arlington, VA, 1993.

AUSA Institute of Land Warfare, Army Budget Analysis Fiscal Year 1995, Arlington, VA, 1994.

AUSA Institute of Land Warfare, Army Budget Analysis Fiscal Year 1996, Arlington, VA, 1995.

Bayer, Bob as quoted by Penelope Schmitt in "Privatization", Public Works Digest, US Army Center for Public Works, Alexandria, VA, Jan-Feb 96, pg 2.

Blackwell, LTG Paul E., "Sustaining Land Power Dominance in the 21st Century," Army Green Book, Oct 1995, p. 110.

Bridger, Chet, "Army Looks At Ways To Streamline Post Operations," Army Times, Oct 9, 1995, p. 24.

Cheney, Dick, Defense Management Report to the President, Washington, DC, July 1989.

Chapman, Dr. Anne, TRADOC Historian, charts on training throughput at TRADOC installations in 1968 and 1994.

Cox, Frank, "Beans, Bullets, and Budgets," Army, May 1990, p. 35.

Decker, Gilbert F., "Today's Modernization: Tomorrow's Readiness," Army Green Book, October 1995, p. 35.

Defense Management Report Implementation Progress Report, DoD, Pentagon, Washington, DC, 1990.

DoD Base Summary. Summary of Domestic and Overseas Base Closure, Pentagon, Washington, DC, 1995.

Finch, Louis C., Deputy Under Secretary of Defense for Readiness, "Keeping Forces Ready to Fight," Defense 95, Issue 4, p. 8.

Little, MG John H., "Installation Command," Army, August 1994, pp. 17-21.

Marshall, Andy, Director of Net Assessments, DoD, "Funding Fork in the Road: People Vs Weapons," interview by Robert Holzer, Army Times, Oct 23, 1995, p. 34.

Matthews, William, "Owens: Big Savings in Privatizing Support," Army Times, Oct 23, 1995, p. 37.

McHugh, Jane, "It's In the Numbers, More Cuts Likely," Army Times, Mar 18, 1996, pg 15.

Naylor, Sean D., "Stretching To Make Ends Meet," Army Times, May 22, 1995, pp. 5-7.

Naylor, Sean D., "To The Limit," Army Times, January 2, 1995, p. 9.

Packard, David et al. A Quest for Excellence, Final Report to the President by the President's Blue Ribbon Commission on Defense Management, Washington, DC, June 1986.

Peters, Katherine, "Doing Less With Less--And It Shows," Army Times, Dec 18, 1995, pp. 12-14.

Reimer, GEN Dennis, "Maintaining a Solid Framework While Building for the Future," Army Green Book, Oct 1995, p. 23-26.

Reimer, GEN Dennis, "Soldiers Are Our Credentials" Military Review, September-October 1995, p. 5.

Rozman, LTC Thomas, "Operational Basing of the Army," Army Logistician, Sep-Oct 1991, pp. 33-35.

Tilelli, GEN John H., "Forces Command: The Focus is Readiness," Army Green Book, Oct 1995, p. 47.

USAREUR FY96 Comparative Analysis...ASG Activities, HQ, USAREUR, Heidelberg, Germany, 1995.

West, Togo, "Doing Right By Soldiers--Putting Them First," Army Green Book, Oct 1995, pp. 13-19.